

REMARKS ON SOME RECENTLY ACQUIRED SNAKES.

BY

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I have lately received from Major G. H. Evans the collection of snakes made by us in Burma some years back, with which are included several interesting specimens collected by Major Evans since.

I propose to make a few remarks on the additions to this collection, and at the same time amplify the remarks made by us on certain specimens which were published in a former Journal (Vol. XIII, pp. 343 and 611).

Dinodon septentrionalis.

I received a remarkably fine specimen of this rare, and very handsome species obtained from the Ruby Mines District, where, Major Evans tells me, he has had another example now lost.* It measures 3 feet $4\frac{1}{2}$ inches in length, the tail accounting for $7\frac{3}{4}$ inches. It bears a very marked resemblance in colouration to the Burmo-Chinese Krait (*Bungarus multicinctus*), so much so that I put the specimen with these kraits into one bottle, and only discovered my mistake when examining the lepidosis critically.

Description.—*Rostral.*—Touches 6 shields; the sutures made with the anterior nasals, and internasals subequal, and about twice those made with 1st labials. *Internasals.*—Two: the suture between them less than half that between the præfrontal fellows, and about half the internaso-præfrontal sutures. *Præfrontals.*—Two: the suture between them one-third to one-fourth greater than the præfronto-frontal suture; touching the internasal, postnasal, loreal, præocular, supraocular, and frontal. *Frontal.*—Touches six shields; the sutures subequal. *Supraoculars.*—Length equals the length of the frontal, breadth less than half breadth of frontal along a line connecting centres of eyes. *Nasals.*—Divided, in contact with the 1st and 2nd supralabials. *Loreal.*—One, not touching the internasal nor the eye. *Præocular.*—One, barely reaching the crown. *Postoculars.*—Two. *Temporals.*—Two touching the 4th, 5th and 6th supralabials on the right side, the 5th, 6th and 7th on the left. *Supralabials.*—Eight, the 3rd, 4th and 5th touching the eye on the left side, 7, the 3rd and

* Mr Boulenger has recorded a specimen from the same locality (Alogok) in this Journal (Vol. XVI, p. 235).

4th touching the eye on the right. *Posterior Sub-linguals* subequal to anterior, in contact with the 4th and 5th infralabials on the right side, the 5th and 6th on the left. *Infralabials*.—The 5th is the largest on the right side, and touches two scales behind, on the left side these shields are damaged. *Costals*.—Two-heads lengths behind the head 17, midbody 17, two heads-lengths before the vent 15. The reduction from 17 to 15 is brought about by the confluence of the 2nd and 3rd rows above the ventrals on the right side, the 3rd and 4th on the left. The last row is barely or not enlarged. Keels appear to be very obscurely present in the median rows in the posterior part of the body. Apical pits present, single. *Ventrals*.—217, obtusely angulate laterally. *Anal*.—Entire. *Subcaudals*.—82, 2nd, 3rd and 4th entire, rest divided.

Colour.—Glossy black with 27 pure white, narrow, well defined arches over the body and 13 over the tail. These involve a scale or a scale and a half vertebrally and dilate in the flanks. The belly is pearly white, but on the tail the dorsal black forms complete bands. The eye has the pupil vertical.

I have not been able yet to satisfy myself that the dentition agrees with that used by Mr. Boulenger to characterise this genus, but two points in external characters are, I think, sufficiently important to justify my doubts on the generic title. In life* the iris is invisible so that the whole eye is black. This appears to be a feature peculiar to the *Lycodon* group and is not seen in other *Dinodons*, at least not in the Japanese *japonicus* nor the Chinese *rufozonatus*, both of which I have seen in life. Further the apical pits are single as I find them in 9 species of the Genus *Lycodon*, not in pairs as in the *Dinodons* I have examined.

Lycodon fasciatus.

In addition to several specimens of this snake from Major Evans I have lately received eight examples from Mr. Hampton from the Ruby Mines.

The specimen alluded to by Major Evans and me in a previous Journal (Vol. XIII, p. 372) as having no præocular I find on re-examination shows us in error. There is a very small præocular

I recently acquired a live specimen from Jeypore, Assam, near the foot of the Naga Hills.

on each side beneath which, and the loreal, the præfrontal finds contact with the eye. I have never seen the same abnormality in any other specimen. One has the 3rd and 4th subcaudals entire. The ventrals and subcaudals of Mr. Hampton's specimens are as follows :—

202 + 84	207 + 83
208 + 82	205 ? + 82 ?
212 + 88	210 ? + 79
209 + 83	

(The range of these shields in 14 specimens collected in Shillong last year by me was ventrals 201 to 213, subcaudals 74 to 80.)

The largest Burmese specimen is 3 feet, and two small ones apparently hatchlings, measure $8\frac{1}{4}$ and $8\frac{1}{8}$ inches.

Colour.—The black bands on the body vary from 28 to 33 and on the tail from 15 to 17. My Shillong specimens had the light bands of a dove colour, whereas nearly all the Burmese specimens are yellow, or yellowish. Evans noted one specimen from Maymyo with reddish-yellow bands (Vol. XVI, p. 169 of this Journal) and Anderson, (Ann. Zool. Yunnan, p. 827) one with 55 reddish bands. In some specimens the light bands are divided by a black line of varying breadth. In one such from Mogok the intermediate black is so broad that each light band is represented by a pair of light lines, and it is probable that Anderson's specimen from Yunnan was similar, thus accounting for the bands being reported as 55, *viz.*, about twice as numerous as normal. I cannot satisfy myself that the dentition conforms to that characterising the genus *Lycodon* as enunciated by Mr. Boulenger, and the fact that the iris in life is flecked with grey, and the apical pits where evident are in pairs seems to point to the better inclusion of this species with the genus *Dinodon*.

Callophis maclellandii.

One specimen calls for special remark from its size, measuring as it does 2 feet $7\frac{1}{2}$ inches. The colour is violaceous resembling the hue of the bloom on a plum or grape. It has 29 bands on the body and 3 on the tail, and represents variety A of Mr. Boulenger's Catalogue. The lepidosis is typical in every way.

Simotes cyclurus.

At least 4 specimens recently obtained from Burma demand some remarks. One marked with indistinct longitudinal dorsal bands, and with the belly unspotted corresponds to Boulenger's variety C. The

lepidosis agrees with *cyclurus* in every way but the following. The supralabials are 7 with the 3rd and 4th touching the eye on the left side, the anal is divided, and the costals two heads-lengths behind the head number 17. I prefer to regard these differences as abnormalities, at any rate for the present, and place the specimen with *cyclurus*. The ventrals are 169, and subcaudals 46.

Another constitutes a colour variety not given by Boulenger in his Catalogue (Vol. II., p. 220). There are 9 dorsal bars across the body, and 4 on the tail. These are margined blackish and are markedly indented anteriorly, and posteriorly vertebrally, and so much so costally that fragments are often detached. The marks are therefore very like those seen in *S. splendidus*, and one variety of *allocinctus*. The intervals are variegated with short blackish, and buff oblique streaks. The belly is heavily chequered with black. Scale characters agree with *cyclurus* except that the 3rd labial is not divided, hence the little shield to which Mr. Boulenger applies the name "subocular" is absent. The ventrals are 171, and subcaudals 36.

A third specimen agrees with Boulenger's variety A, except that no longitudinal dorsal bands are visible. The costals are in 19 rows two heads-lengths behind the head, and 21 in midbody. Normally the costals in these two situations number the same in this as in other species of *Simotes*. The ventrals are 174, and the subcaudals 50. A fourth specimen agrees with Boulenger's variety A, except that the longitudinal dorsal bands are obsolete.

Simotes splendidus.

There are three specimens not including the head and neck of our original specimen reported in this Journal (Vol. XIII, p. 537). Two specimens are those recorded by Major Evans in this Journal (Vol. XVI, p. 362). I count the ventrals in the former specimen (11½ inches long) 185 not 174 as reported by Major Evans. A third specimen measures 9¼ inches. In this the 3rd and 4th supralabials are divided transversely on both sides. The temporals are irregular in these specimens; in No. 1 (11½ inches) the upper is confluent with the parietal, a slight partial suture indicating that this is the true interpretation of the anomaly. In No. 2 (28¾ inches) the temporals are two. In No. 3 (9¼ inches) the lower temporal is divided.

No. 1 specimen has $15+3$ bars on body and tail, and the ventrals and subcaudals $185+35$. No. 2 has $15+3$ bars, and ventrals and subcaudals $174+43$. No. 3 has $15+3$ bars and ventrals and subcaudals $193?+37$. All these specimens agree in the following ways. The rostral is higher than broad; and the portion visible above is greater than its distance to the frontal. The internasals are four, the median pair separating about $\frac{2}{3}$ of the prefrontals. The prefrontals are two. It will be remembered that in our original partial specimen there were four. The frontal is longer than the parietals. The anterior nasal is much larger than the posterior, and the suture from the nostril runs to the 2nd supralabial, a very unusual character in any snake including the members of this genus. The loreal is about as long as high or shorter.

I think I can show good reason to doubt the accuracy of the locality from which the type specimen is supposed to have been collected, *viz.*, Wynad (*vide* Boulenger's Catalogue Vol. II, p. 218).

My study of the geographical distribution of snakes in India has brought to light the fact that no less than eight species have been recorded from Southern India on the sole authority of Colonel Beddome which are otherwise only known from Tracts to the North and East of Peninsular India.

These are : 1 *Tropidonotus parallelus*, 2 *T. subminiatus*, 3. *T. himalayanus*, 4 *Lycodon jara*, 5 *Simotes splendidus*, 6 *Bungarus fasciatus*, 7 *Simotes octolineatus*, and 8 *Dendrelaphis caudolineatus* (*vide* Boulenger's Catalogue and Sclater's list of Snakes in the Indian Museum, 1891). Now the first 6 of these are all to be obtained in Burma, and the last 2 in Tenasserim. That Beddome received snakes from Burma is certain as he presented specimens of *Simotes cruentatus* and *Dipsadomorphus hexagonotus* from Burma to the British Museum (*vide* Boulenger's Catalogue). Again he obtained specimens from Tenasserim as he presented the British Museum with specimens of *Simotes violaceus*, and *Simotes cyclurus* from that region (*vide* Boulenger's Catalogue). This being so one cannot escape the conviction that a collection of snakes from Burma including specimens of the first 6 specified above, and another from Tenasserim including numbers 7 and 8 were inadvertently mixed up with his Southern Indian Collection. The mistake is one very easy for any collector to understand.

Simotes theobaldi.

Several specimens were received, some of which have been previously recorded in this Journal. The colour varieties A and B mentioned by Boulenger in his Catalogue are doubtful. I find every gradation between the two. In some there are a very few spots on the belly congregated before the anus and none elsewhere. In others there are a very few spots scattered along most of the belly length, and in others no single spot. The features which specially attracted my attention are as follows:—*Rostral*.—The height nearly equals the breadth: the visible portion above is distinctly less than its distance to the frontal. The frontal is distinctly shorter than the parietals. The anterior nasal is considerably larger than the posterior, but the lower margins of the two are subequal. The suture from the nostril runs to the 1st labial. The loreal is distinctly longer than high, sometimes as much as twice the length. The ventrals, and subcaudals of 9 specimens are as follows:—177+32, 170+?, 170+35, 169+31, 169+40, 164+30, 168+39, 180+33, and 167+40.

Dryophis myeterizans.

One of the fœtus removed from a gravid female, recorded by Evans and myself in this Journal (Vol. XIII, p. 615), I have re-examined and find measures about 13 inches. We omitted to note this. I received with other snakes from Major Evans three specimens of the peculiar colour variety of this snake with grey on the belly between the white lines. I think it should be given a distinct title, and propose for it *tephrogaster*. I cannot be sure whether these came from Burma or were part of a collection obtained for me in Ceylon (Henaratgoda). They agree in scale characters with *myeterizans*. The ventrals and subcaudals are 176+146?, 176+153, and 181+151.

Amblycephalus andersoni.

I examined three specimen's of this hitherto little known snake. The exact localities in Burma are not recorded. The longest is 1 foot 7 inches. The vertebrales are not enlarged. The ventrals and subcaudals are 150+45, 163+45, and 156+40. It is sometimes doubtful in this as in other *amblycephalus* whether the subocular is a single elongate crescentic shield, or whether divided, as it is very

prone to be thrown into one or more creases resembling sutures. I think in these examples the shield is without doubt entire, except on the right side in one specimen where it appears divided by a suture.

Lachesis purpureomaculatus.

Three specimens were included in Major Evans' collection with the scales 25 in midbody, and which, according to Mr. Boulenger's Catalogue, should be considered as belonging to this species. I have the greatest doubt of the validity of this species, for I can see no differences other than the number of the costal rows between specimens called by him *gramineus* and *purpureomaculatus*. I have examined three and four times over all the available specimens of both in the British Museum collection and again in other Institutions and have taken particularly careful notes of the commoner varieties with 21 rows in midbody. Again now I have contrasted the three specimens with 25 costal rows, with five others from Burma where the costal rows are 23, and five others with 21 rows. I can find no means of separating these except by the costal rows, and consider that all these specimens belong to one species which is remarkable for the variability of the costal rows, viz., 19 to 27. Specimens in which the costal rows number 25 to 27 should, I think, be considered as variety *purpureomaculatus* of the species *gramineus*, which title claims priority.

Haplocereus ceylonensis.

I have examined two specimens of this rather uncommon Ceylon snake. I notice that the anterior nasal shield is confluent with the 1st supralabial, and the same feature occurred in the only specimen I saw in the Colombo Museum last year. The 4th supralabial alone touches the eye in both specimens. The ventrals and subcaudals are 190 + 42, and 217 + 44. These were both obtained, I am almost certain, at Henaratgoda (Ceylon).